



Facsimile

To: Examiner Ario Etienne, Group Art Unit: 2157
Fax No.: (703) 746-7239
From: George M. Macdonald
Date: September 19, 2003
Subject: Serial No.: 10/064,293
Pages: __17__ (including this cover)

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Re: U.S. Patent Application Serial No.: 10/064,293
Our Docket # F-533

Enclosed please find an Information Disclosure Statement in the above referenced application.

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following correspondence is being transmitted via facsimile to:

U.S. Patent and Trademark Office
Attention: Examiner Ario ETIENNE, Group Art Unit: 2157
Facsimile No. (703) 746-7239

1. Information Disclosure Statement w/2 references (16 pages).

on September 19, 2003
Date of Transmission


Signature

George M. Macdonald
Name of Registered Rep.
Reg. No.: 39,284

September 19, 2003
Date

Serial No. 10/064,293
Attorney Docket No.: F-533

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: patent application of:

Jean-Hriam Coffy, et al.

Serial No.: 10/064,293

Filed: June 28, 2002

) Attorney Docket No.: F-533

) Customer No.:

) 00919

)

) Examiner: Ario Etienne

) Group Art Unit: 2157

) Date: September 19, 2003

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For: **SYSTEM AND METHOD FOR SELECTING AN EXTERNAL USER
INTERFACE USING SPATIAL INFORMATION**

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO BOX 1450
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

This Information Disclosure Statement is not intended to constitute an admission that any patent, publication or other information referred to herein is "prior art" against this application unless specifically designated as such.

In accordance with 37 CFR § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(b) exists.

In accordance with 37 CFR § 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 CFR § 1.56(b).

Serial No. 10/064,293
Attorney Docket No.: F-533

This Information Disclosure Statement is being filed in accordance with the following provisions, as identified below with marked boxes, available under 37 CFR § 1.97:

1. ☒ **37 CFR §1.97(b)** - This Information Disclosure Statement is being filed according to one of the following: (i) within 3 months of the filing date of this application (other than a CPA); (ii) within 3 months of the date of entry of the national stage as set forth in § 1.491 in an international application; (iii) before the mailing of a first Office action on the merits; or (iv) before the mailing of a first Office action after the filing of a request for continued examination under § 1.114.

OR

2. ☐ **37 CFR §1.97(c)** - This Information Disclosure Statement is being filed before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and it is accompanied by the statement or fee as identified below:

2.1 ☐ Specified Statement under 37 CFR § 1.97(e)(1) - see below.

OR

2.2 ☐ Specified Statement under 37 CFR § 1.97(e)(2) - see below.

OR

2.3 ☐ Please charge Deposit Account No. **16-1885** in the amount of \$180.00 to cover the fee set forth in § 1.17(p).

**** Provisional Fee Authorization.** If Box 2.1 or Box 2.2 is marked above and a final action under § 1.113 has in fact been mailed before the filing of this Information Disclosure Statement, then the Commissioner is authorized to charge Deposit Account No. **16-1885** in the amount of \$180.00 to cover the fee set forth in § 1.17(p) as if Box 2.3 had been marked.

OR

3. ☐ **37 CFR §1.97(d)** - This Information Disclosure Statement is being filed on or before payment of the issue fee and it is accompanied by the statement and fee as identified below:

3.1.1 ☐ Specified Statement under 37 CFR § 1.97(e)(1) - see below.

OR

3.1.2 ☐ Specified Statement under 37 CFR § 1.97(e)(2) - see below.

AND

3.2 ☐ Please charge Deposit Account No. **16-1885** in the amount of \$180.00 to cover the fee set forth in § 1.17(p).

Specified Statement under 37 CFR § 1.97(e)(1) - Each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement.

Specified Statement under 37 CFR § 1.97(e)(2) - No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing below, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

Serial No. 10/064,293
Attorney Docket No.: F-533

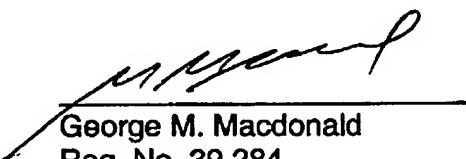
A list of the patent(s) and/or publication(s) is set forth on the attached Form PTO-1449 (Modified).

A copy of each of the items on PTO-1449 (Modified) is supplied herewith.

The Commissioner is hereby authorized to charge any additional fees which may be required to Deposit Account No. 16-1885.

A duplicate copy of this transmittal is enclosed for use in charging the Deposit Account.

Respectfully submitted,


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PITNEY BOWES INC.
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35 Waterview Drive, P.O. Box 3000
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Plus attachments: Form PTO-1449 (Modified)
One copy of each of the references

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, on September 19, 2003 (Date of Transmission).

George M. Macdonald, Reg. No. 39,284 (Name of Registered Rep.)

 (Signature)

September 19, 2003 (Date)



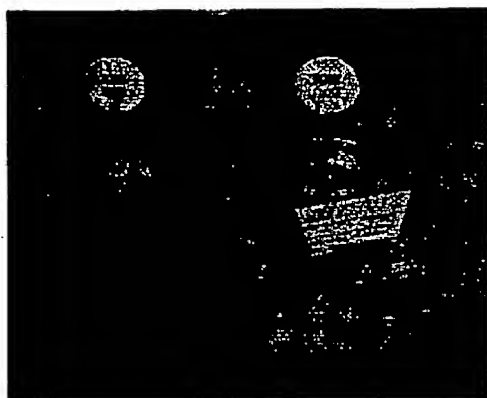
Indoor GPS: The No-Chip Challenge

This article continues our series on the "one-chip challenge," the effort to reduce the physical parameters of GPS receiver technology to accommodate its integration into an ever-wider variety of platforms, products, and systems - particularly portable devices. Written by engineers at a GPS company focusing on cellular telephone markets, the article describes a receiver architecture that employs a large number of signal-processing correlators to increase the sensitivity of user equipment to the point that..

September 1, 2001

By: Frank van Diggelen, Charles Abraham

GPS World



An irresistible force is moving across our quiet landscape, a force that is expected to increase demand for GPS by over one hundredfold, from a few million to hundreds of millions of units per year. This force is the demand for location capability in cell phones, driven in the United States by the Federal Communications Commission (FCC) requirement that cell phones be able to identify their location automatically with GPS-like accuracy (see sidebar "FCC's E911 Mandate").

During 2000, total sales for four GPS manufacturers - Trimble, Garmin, SIRF, and Magellan - amounted to approximately two million units (based on unit sales reported in, or estimated from information contained in, public documents issued by these companies). The potential GPS market driven by the cell-phone demand, however, looks considerably different. According to an April 2001 Strategis Group report, "Handset Databank," worldwide cellular handset sales in 2000 totaled 426.5 million. The same report projects that handset sales in 2005 will reach 715 million units.

This cell-phone market opportunity represents one of the primary drivers behind the search for a GPS receiver technology that goes beyond a single-chip solution to what could be called a "no-chip" solution. Such a solution would share functionality with elements of the wireless communications handset itself.



Figure 1 GPS "System on a chip" architecture. The orange-colored components are those parts marked for extinction if a dedicated CPU can be eliminated.

Successful adoption of GPS into cell phones requires that the technology meet new demands, including indoor operation, near-instantaneous time to first fix, and very low power consumption. Feedback from phone manufacturers suggests that incorporating GPS should add no more than \$10 to the parts cost of a wireless handset.

Conventional wisdom holds that the natural evolution of GPS technology is moving toward a single-chip solution encompassing everything from the antenna connection to a formatted serial output stream. Emerging silicon technologies, allowing integration of RF and digital circuits, are reaching the point where a single chip, performing all the functions of a conventional GPS receiver, may soon be feasible. Although this represents a possible path to integration in cell phones, a single-chip GPS may not offer the best solution.

One significant issue is the relative immaturity of semiconductor processes for simultaneously implementing RF circuits and large blocks of digital signal processing. Because of this, nearly all commercial GPS manufacturers have focused their efforts on two-chip solutions: an RF chip and a digital system-on-a-chip encompassing the GPS baseband signal processing and an associated microprocessor.

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